EXHIBIT L

Sioux Steel Company v.
KC Engineering, P.C.

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say exactly that. Sioux Steel's own literature on their website advertises that these bins are for free-flowing materials.

Q Wheat is heavier, has a greater bulk density than corn, corn meal, or soy meal; is that correct?

A Yes.

Q Wheat is considered to exert the highest pressure on bins.

A Yeah. Of common agricultural materials, I'd say wheat is generally considered to be the heaviest.

Q The overpressure factors presented in EP433 are based on full-scale bins filled with wheat.

A Yes.

Q The EP433 references the results of Platanov, P-l-a-t-a-n-o-f [sic], and Kovtun, K-o-v-t-u-n, 1959 study on wheat based overpressures which serve as a basis for the ACI recommendations for calculations of loads exerted by granular materials.

A Is that from the EP433?

Q That's correct. And that should be Exhibit --

A 26?

Q 26, yes. It should be on the next page, I think.

(Pause in the proceedings.)

A I believe what you said was correct.

Q Okay. EP433 is the only US-recognized standard for the

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calculations of loads exerted by granular materials on steel hoppers?

A No.

Q What other standards are available in the United States?

A ACI 313, primarily. There are also technical papers that are used in the industry. Some of them by Jenike & Johanson. Well-regarded research papers.

Q And ACI -- is that what you said?

A ACI 313.

Q 313?

A Uh-huh.

Q Did the design that you reviewed comply with ACI 313?

A Part -- you know, as far as what we did at the time. We didn't check those connections. But those connections did not comply. The -- well, it would be more correct to say that they didn't comply with the AISC, 13th Edition. The loads, as far as I can tell, that Chad was coming up with were per EP433.

Q Okay. My question was, though -- I just want to go back to recognized standards.

A Okay.

Q As it relates to the calculation of loads exerted by granular material on steel bins and hoppers is that EPA 433 [sic] is the only recognized standard, except

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you've also identified AC 1313 [sic] as a standard, correct?

A Well, and I've also identified some papers by Jenike & Johanson, which would be applicable for the kinds of hoppers that store non-free-flowing grains where mass flow is desired. EP433 is not suitable for non-free-flowing materials because it's a funnel flow; it's based on a funnel-flow hopper.

Non-free-flowing materials should be stored in mass-flow hoppers, and EP433 does not address the design of mass-flow hoppers. You are directed to look to the literature, and Jenike & Johanson have written papers that would constitute the accepted literature.

Q Okay. Now, I want to just make a distinction here, though. The accepted literature of recognized experts is different than published standards, correct?

A That is correct.

Q And the published standards that we go by -- whether or not they're applicable is another issue -- is EP433 and ACI 313?

A Well, we do not go by EP433 for mass-flow bins. That would be inappropriate.

Q So we get down to what you're saying is that your position is that an EP433 bin is not suitable for soy meal and that the only type of bin design suitable for

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soy meal is going to be a mass-flow bin. Is that your position?

A Unless we're talking about a very small bin.

Q Let's talk in the context of a 30 footer.

A Yeah, in the context of a 30 footer, I think it needs to be mass flow, and I think that the literature is very clear on that.

Q Would you agree that EP433 standard is a minimum mandatory standard for the design of steel hopper bins for grains and granular materials?

A For free-flowing granular materials and grains, yes.

Q It would also be the minimum standard relating to, as you would describe it, non-flowing if you're going to have structural standards for it.

A That is not something that is specifically stated in the purpose of the document. EP433 says under Purpose that it presents methods of estimating grain pressures within centrally loaded and unloaded bins used to store free-flowing, agricultural whole grain.

It is not specifically a purpose that that is supposed to be used for per the standard itself. However, I would agree that if you're doing a mass-flow bin -- and I do this myself -- I would also check it per EP433. I would check both.

Q So whether it's a funnel-flow or a mass-flow bin --

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did something wrong by doing that. And, you know, we've gone through why we didn't provide a stamp. This is a unique situation. So -- I don't like how you try to make very broad, general -- ask very broad questions with a yes or no answer. It's, I don't think, fair.
Q KC's report to Sioux Steel, Exhibit 9, is a, quote, engineering document prepared for the client.
A Yes.
Q The term "in responsible charge" means having direct control of and personal supervision over any work involved in the practice of engineering.
A Correct.
Q KC had no direct control of or personal supervision over any work performed by a Sioux Steel employee.
A That's correct.
Q A licensed professional engineer submitting a report on a structural engineering design review of drawings and specifications cannot rely upon the work of the client.
A I disagree.
Q And by that I mean the work has to be your work, not somebody else's work.
A The work that I present is my work, has to be my work, but I can use the information provided by the client.
Q Any submission of an engineering document that is non-final must be clearly labeled preliminary or draft;

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is that correct?
A In the context of engineering stamping laws, yes.
Q It's a responsibility of the licensee, licensed professional engineer, to forward to the client any and all revisions to a submission or report to the client.
A Send them all revisions? Yes.
Q Would you agree that flow experts cannot agree upon where a funnel channel will form in a funnel-flow bin?
A I don't think it's that they can't agree with each other. I think that it's that they recognize that it's random. It's rather -- it's not always predictable.
Q The collapse of large voids from arching and ratholing induces tremendous dynamic pressure loads on the structure.
A That's correct.
Q Engineering procedures for hopper bin design requires a determination of the strength and flow properties of the bulk solid for the worst likely flow conditions expected.
A Yes. And I think in order to do that you would use the standards, the reference standards and, you know, technical papers. I think generally people don't go out and get a sample of the product that's going to be stored and test it themselves. It would have been impossible in this case because we were not made aware

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of the material that was going to be used. And it's just generally not what happens. You use the reference standards.
Q Bins designed pursuant to the hopper bin drawings submitted to you that are out there in the marketplace right now and in use would not be sufficient as designed for...
A I'm sorry. Say that again.
Q Okay. Hopper bins in the market that were manufactured under the design drawings you reviewed are insufficient and do not meet the standards of EPA 433 [sic] as well as the steel contractors manual, correct?
A You're talking about Sioux Steel's bins?
Q I'm talking about Sioux Steel's bins that are out there in the marketplace that were manufactured under the design drawings that you reviewed.
So we're agreed on that?
A Yes.
Q Those bins are not sufficient as designed for free-flowing grains.
MR. TOBIN: I'm going to object and -- I mean, I believe it's our understanding that there's a claim in this lawsuit that whatever bins were out there have been retrofitted post this failure, and we have no idea what those retrofits are.

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MR. GOODSELL: Well, we'll get there --
MR. TOBIN: So I --
MR. GOODSELL: -- in terms of that idea.
MR. TOBIN: Well, I don't --
THE WITNESS: That is a concern of mine, that --
BY MR. GOODSELL:
Q Well, I want to just finish this line of questioning, though.
So the bins that have been manufactured -- I think there's approximately 12 of them out there, and these bins were manufactured under the design criteria submitted to you for review. Those bins out there in use today would be insufficient as a matter of design because of their failure to comply with what we talked about earlier.
A Are you saying that they're out there now, that they haven't been fixed?
Q I'm just saying if they're out there, those bins that have been sold under that design would be insufficient as designed for free-flowing grains. Is that a correct statement?
A That is a correct statement. If they haven't modified that seam, then that would be insufficient.
Q And have you given notice to Sioux Steel after you became aware of this design defect or not suitable as